

Amendments to the Specification:

Please amend the specification as follows:

On page 26, replace paragraph beginning at line 31 and ending on page 27, line 3, with the following rewritten paragraph:

Various details about the structural and functional configuration and operation of preferred ambulatory medical devices and preferred communication devices are found in several US patent applications filed concurrently herewith and incorporated herein by reference in their entireties: (1) Docket No. ~~USP-1075-A~~ 047711-0217, (2) Docket No. ~~USP-1076-A~~ 047711-0213, (3) Docket No. ~~USP-1077-A~~ 047711-0219, (4) Docket No. ~~USP-1079-A~~ 047711-0212, and (5) Docket No. ~~USP-1080-A~~ 047711-0222.

On page 27, replace paragraph beginning at line 4, insert the following rewritten paragraph:

U.S. patent application Serial No. ~~To Be Determined~~ 09/768,045, filed on January. 22, 2001 (concurrently herewith), by Starkweather, et al., entitled "*Ambulatory Medical Apparatus and Method Having Telemetry Modifiable Control Software*", corresponding to Medical Research Group, Inc. Docket No. ~~USP-1075-A~~ 047711-0217, is hereby incorporated herein by this reference as if set forth in full herein. This application provides teachings concerning an implantable medical device (e.g. infusion pump) and handheld communication device wherein the implantable device is capable of operating under control of different software programs, wherein a first program operates after resetting the implantable device and is not capable of allowing significant medical functionality but is capable of selected telemetry operations including telemetry operations that allow replacement software to be downloaded, and wherein a second program may be caused to take control of the device and enables medical functionality and selected telemetry operations but is incapable of receiving replacement software. It is also taught that a software image may be received in multiple messages where each message is provided with its own validation code and wherein a validation code for the whole image is

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provided and wherein each provided validation code must be compared to a derived validation code prior to accepting the validity of the replacement software.

On page 27, replace paragraph beginning at line 23, insert the following rewritten paragraph:

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U.S. patent application Serial No. ~~To Be Determined~~ 09/768,202, filed on January 22, 2001 (concurrently herewith), by Lebel, et al., entitled "*Ambulatory Medical Apparatus and Method Using a Robust Communication Protocol*", corresponding to Medical Research Group, Inc. Docket No. ~~USP-1076-A~~ 047711-0213, is hereby incorporated herein by this reference as if set forth in full herein. An implanted medical device (e.g. infusion pump) and external device communicate with one another via telemetry wherein messages are transmitted under a robust communication protocol. The communication protocol gives enhanced assurance concerning the integrity of messages that impact medical operations of the implantable device. Messages are transmitted using a multipart format that includes a preamble, a frame sync, a telemetry ID, data, and a validation code. The data portion of the message includes an op-code that dictates various other elements that form part of the message. The data portion may also include additional elements such as sequence numbers, bolus numbers, and duplicate data elements. A telemetry ID for the transmitting device may be implicitly embedded in the message as part of the validation code that is sent with the message and that must be pre-known by the receiver to confirm the integrity of the received message.

On page 28, replace paragraph beginning at line 7, insert the following rewritten paragraph:

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U.S. patent application Serial No. ~~To Be Determined~~ 09/768,206, filed on January 22, 2001 (concurrently herewith), by Bowman, et al., entitled "*Ambulatory Medical Apparatus and Method using a Telemetry System with Predefined Reception Listening Periods*", corresponding to Medical Research Group, Inc. Docket No. ~~USP-1077-A~~ 047711-0219, is hereby incorporated herein by this reference as if set forth in full herein. This application provides teachings

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concerning an implantable medical device (e.g. infusion pump) and an external device that communicate with one another via telemetry messages that are receivable only during listening windows. Each listening window is open for a prescribed listening period and is spaced from other listening windows by an interval. The listening period is typically kept small to minimize power consumption. To increase likelihood of successful communication, the window may be forced to an open state, by use of an attention signal, in anticipation of an incoming message. To further minimize power consumption, it is desirable to minimize use of extended attention signals, and this is accomplished by the transmitter maintaining an estimate of prescribed listening start times and attempting to send messages only during listening periods. In the communication device, the estimate is updated as a result of information obtained with the reception of each message from the medical device.

On page 28, replace paragraph beginning at line 25, insert the following rewritten paragraph:

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U.S. patent application Serial No. ~~To Be Determined~~ 09/768,207, filed on January 22, 2001 (concurrently herewith), by Starkweather, et al., entitled "*Method and Apparatus for Communicating Between an Ambulatory Medical Device and Control Device Via Telemetry Using Randomized Data*", corresponding to Medical Research Group, Inc. Docket No. USP-1079-A 047711-212, is hereby incorporated herein by this reference as if set forth in full herein. This application provides teachings concerning an implantable medical device (e.g. infusion pump) and handheld communication device that communicate with one another via telemetry wherein transmitted messages have enhanced numbers of and/or regularity of bit transitions to minimize the risk of synchronization loss between transmitted bits of data and received bits of data. It is taught that bit transitions for portions of messages may be enhanced by applying a pseudo-randomization scheme to those portions of messages that are transmitted in a way that allows the receiver to extract the original data from the received randomized data. Preferred randomization techniques modify (i.e. randomize) the data using a CRC value that is being accumulated while simultaneously causing the modified data to modify subsequent accumulation

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of the CRC itself. Upon reception, the reversal of data randomization is then made to occur so that the intended message is appropriately received.

On page 29, replace paragraph beginning at line 11, insert the following rewritten paragraph:

US Patent Application Serial No. ~~To Be Determined~~ 09/768,221, filed on January 22, 2001 (concurrently herewith), by Lebel, et al., entitled "Microprocessor Controlled Ambulatory Medical Apparatus with Hand Held Communication Device", corresponding to Medical Research Group, Inc. Docket No. ~~USP-1080-A~~ 047711-0224, is hereby incorporated herein by this reference as if set forth in full herein. This application provides teachings concerning an implantable medical device (e.g. infusion pump) and handheld communication device, wherein an implantable infusion pump possesses operational functionality that is, at least in part, controlled by software operating in two processor ICs which are configured to perform some different and some duplicate functions. The pump exchanges messages with the external communication device via telemetry. Each processor controls a different part of the drug infusion mechanism such that both processors must agree on the appropriateness of drug delivery for infusion to occur. Delivery accumulators are incremented and decremented with delivery requests and with deliveries made. When accumulated amounts reach or exceed, quantized deliverable amounts, infusion is made to occur. The accumulators are capable of being incremented by two or more independent types of delivery requests. Operational modes of the infusion device are changed automatically in view of various system errors that are trapped, various system alarm conditions that are detected, and when excess periods of time lapse between pump and external device interactions.
